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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,613	05/20/2002	Marc Charbonnaux	3732-0105P	6472
2292	7590	06/28/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			GRIER, LAURA A	
			ART UNIT	PAPER NUMBER
			2644	6

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,613

Applicant(s)

CHARBONNAUX ET AL.

Examiner

Laura A Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: the Abstract should commence on a separate page consisting of only contents of the Abstract.

Appropriate correction is required.

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1-9** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **claim 1**, the claim language indicates more than one oscillator, thus it unclear of the number to oscillators claimed.

Regarding **claims 1 and 2**, respectively, claim modifying the pulse into at an electric micro-phase shift pulse or modulation. It is unclear the examiner of what is mean by micro-phase shift. The claims are also indefinite do the fact that the signal may an analog or digital signal and/or processed with analog or digital components. Thus, when the signal is analog, it is unclear as how are electric pulses provided.

Claim 1, recites the limitation "the original electric pulse" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 2, recites the limitation "the original electric pulse" in line 7. There is insufficient antecedent basis for this limitation in the claim.

5. **Claims 4-9** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Regarding **claims 4-9**, the term, “embodiments” makes the claims indefinite as to what is specifically claimed, or how many embodiments are claimed or which components: the process and unit consist of various components such as the electro-acoustic transducer, an oscillator, power supply, etc. It is suggested by the examiner that the term, ‘embodiments” be replaced with a terminology more defined and clear to the concept of the invention.

6. Thus in view of the indefiniteness of the claim language, the claims will be examined in the simplest and broadest interpretation of the claims and in view of the specification.

Claim 1 will be examined as a process in sound reproduction field made up on an oscillator (one oscillator) on the electrical signal supply of at least one electro-acoustic transducer, wherein, the oscillator is created based upon the components (self-supplied) used or coupled between amplifier and loudspeaker (see specification page 1, line 31 – page 2, lines 1-8).

Claim 2 will be examined based upon the broadest interpretation as provided, with the interpretation of an oscillator created based upon the components (self-supplied) used or coupled between amplifier and loudspeaker (see specification page 1, line 31 – page 2, lines 1-8).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-3** are rejected under 35 U.S.C. 102(b) as being anticipated by Kates, U. S.

Patent No. 4243840.

Regarding **claim 1**, Kates discloses a loudspeaker system (col. 4, lines 25-67 – col. 5, lines 1-2). Kates' disclosure comprises passive crossover filters (30 and 28) coupled between a power amplifier (26) and loudspeakers (22 and 28), in which the audio signal is supplied on an energy signal, which indicates sound reproduction with an oscillator on the electrical signal supply to at least one electro-acoustic transducer, wherein the signal is modified via the filters.

Regarding **claim 2**, Kates discloses a loudspeaker system (col. 4, lines 25-67 – col. 5, lines 1-2). Kates' disclosure comprises passive crossover filters (30 and 28), which reads on one electric component per channel on at least two channels in parallel, made up of passive components of the same type; the filters are coupled between a power amplifier (26) and loudspeakers (22 and 28), in which the audio signal is supplied on an energy signal, which inherently indicates an oscillator creating at least one electric micro-phase shift modulation as evident by the fact the signal is modified via the filters and indicative of the concept of the invention as disclosed in the specification.

Regarding **claim 3**, Kates discloses everything claimed as applied above (see claim 2). Filter (30) is a high-pass filter, and filter (28) is a low pass filter, which reads on the electric components of different values.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Laura A. Grier

June 23, 2004